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EXAMINER
GOLD, AVI M

ART UNIT	PAPER NUMBER
2457	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/702,094	FRIEDMAN ET AL.	
	Examiner	Art Unit	
	AVI GOLD	2457	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 January 2009*.

2a)☐ This action is FINAL. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *57-67* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *57-67* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *121608,11609,12309*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to the amendment filed on January 23, 2009. Claim 57 was amended. Claims 68-88 were cancelled. Claims 57-67 are pending.

Response to Amendment

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 57-60, 62, 63, and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leinwand et al., U.S. Patent No. 6,130,890, further in view of Campion et al., U.S. Patent No. 6,249,813.

Leinwand teaches the invention substantially as claimed including a method and system for improving routing decisions, particularly for Internet data packets traveling to a destination associated with another country (see abstract).

As to claim 57, Leinwand teaches a method for routing network traffic, comprising:

a. receiving the network traffic at a router (col. 3, lines 9-11, Leinwand discloses a packet traveling over a system from source to destination);

b. determining a geographic location of the router using an IP address of the router (col. 2, lines 14-19, Leinwand discloses autonomous systems acting as intermediate nodes to route a packet to its destination; col. 3, lines 20-44, Leinwand discloses autonomous systems having a geographic locations and IP addresses assigned to a system based on its geographic area);

c. determining a destination for the network traffic received at the router (col. 3, lines 11-13, Leinwand discloses a destination in a geographic area);

d. determining a geographic location of the destination using an IP address of the destination (col. 3, lines 11-13, lines 20-44);

e. determining a first route to the destination, the first route comprising at least a first intermediate routing device (col. 3, lines 9-11);

f. deriving a geographic location of the first intermediate routing device using an IP address of the first intermediate routing device, (col. 3, lines 9-44, col. 7, lines 5-25, Leinwand discloses routers making a decision as to which of the autonomous systems the data packet is going to next) by performing the steps of:

extracting geographic naming information for the first intermediate routing device, from a host name associated with the first intermediate routing device (col. 15, line 63 – col. 16, line 49);

comparing at least a part of the extracted geographic naming information for the first intermediate routing device to one or more of the plurality of variations of geographic names stored in a database containing geographic naming information (col. 15, lines 27-35, col. 15, line 63 – col. 16, line 49);

determining a geographic location of the first intermediate routing device based at least in part on the comparison (col. 15, lines 27-35, col. 15, line 63 – col. 16, line 49);

g. analyzing a first interconnection between one or more routing devices in the first route by approximating the behavior at the one or more routing devices in the first route (col. 3, lines 9-44, col. 7, lines 5-25, col. 10, line 57 – col. 11, line 24, Leinwand discloses avoiding overloading by analyzing links and approximating behavior);

h. determining a second route to the destination, the second route comprising at least a second intermediate routing device;

i. deriving a geographic location of the second intermediate routing device using an IP address of the second intermediate routing device (col. 3, lines 9-44);

j. analyzing a second interconnection between one or more routing devices in the second route by approximating the behavior at the one or more routing devices in the second route (col. 3, lines 9-44, col. 7, lines 5-25, col. 10, line 57 – col. 11, line 24);

k. selecting a route from one of the first route or the second route using the geographic location of the destination, the geographic location of the router, the geographic location of the first intermediate routing device, the geographic location of the second intermediate routing device, the approximated behavior at the one or more routing devices in the first route, and the approximated behavior at the one or more routing devices in the second route (col. 2, lines 14-19, col. 3, lines 9-44, col. 7, lines 5-25, col. 10, line 57 – col. 11, line 24); and

l. directing the network traffic along the selected route to the destination (col. 3, lines 9-34, Leinwand discloses a packet being routed to its destination based on its source or destination location).

Leinwand does not explicitly teach geographic naming information in a first part of a host name.

However, Campion teaches an automated method of and apparatus for internet address management (see abstract). Campion teaches the use of a prefix of a host name including the city and state of where the host is located (col. 7, lines 19-38).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Leinwand in view of Campion to use geographic naming information in a first part of a host name. One would be motivated to do so because it allows for the location of a host to be easily identified.

Regarding claim 58, Leinwand teaches the method of claim 57, wherein the network traffic comprises a request and the destination comprises a server (col. 2, lines 14-20, Leinwand discloses autonomous systems requesting traffic).

Regarding claim 59, Leinwand teaches the method of claim 57, wherein the selecting step further comprises selecting a route with a shortest distance to the destination (col. 2, lines 14-20, Leinwand discloses autonomous systems requesting traffic).

Regarding claim 60, Leinwand teaches the method of claim 57, wherein the selecting step further comprises selecting a route having the shortest latency time (col. 9, lines 22-39, Leinwand discloses choosing a route to avoid delays in transmission).

Regarding claim 62, Leinwand teaches the method of claim 57, wherein determining a destination comprises selecting a destination based on its load (col. 11, lines 5-24, Leinwand discloses choosing a route to avoid congestion).

Regarding claim 63, Leinwand teaches method of claim 57, wherein determining a destination comprises selecting a destination based on a connection speed associated with a source of the network traffic (col. 11, lines 5-24, Leinwand discloses choosing a route having the fastest speed for the data packet).

Regarding claim 66, Leinwand teaches the method of claim 57, wherein the network comprises the Internet and the network traffic comprises packets (col. 4, lines 36-38, Leinwand discloses network traffic comprised of packets routed over the Internet).

3. Claims 61, 64, and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leinwand and Campion further in view of Rochberger et al., U.S. Patent No. 6,577,653.

Leinwand teaches the invention substantially as claimed including a method and system for improving routing decisions, particularly for Internet data packets traveling to a destination associated with another country (see abstract). Campion teaches the invention substantially as claimed including an automated method of and apparatus for internet address management (see abstract).

As to claims 61, 64, and 65, Leinwand and Campion teach the method of claim 57.

Leinwand and Campion fail to teach the limitation further including the selection of a route based on bandwidth.

However, Rochberger teaches establishing a route in an Asynchronous Transfer Mode (ATM) network utilizing one or more parallel route segments (see abstract). Rochberger teaches the use of selecting a route based on having the most available bandwidth and selecting the amount of bandwidth available at the destination (col. 9, lines 28-62).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Leinwand and Campion in view of Rochberger to select a route of traffic based on bandwidth. One would be motivated to do so because decisions based on bandwidth help avoid congestion in data traffic.

4. Claim 67 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leinwand further in view of Ansell et al., U.S. Patent No. 6,151,631.

Leinwand teaches the invention substantially as claimed including a method and system for improving routing decisions, particularly for Internet data packets traveling to a destination associated with another country (see abstract). Campion teaches the invention substantially as claimed including an automated method of and apparatus for internet address management (see abstract).

As to claim 67, Leinwand and Campion teach the method of claim 57.

Leinwand and Campion fail to teach the limitation further including the assignment of a confidence level.

However, Ansell teaches an efficient mechanism for determining a geopolitical territory in which a computer of a wide area computer network is located (see abstract). Ansell teaches the use of a level of confidence (col. 8-9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Leinwand and Campion in view of Ansell to assign a level of confidence. One would be motivated to do so because it determines if a specification is met with satisfaction.

Drawings

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the extraction of a geographic name from a first part of a host name and comparing it to a database must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Response to Arguments

6. Applicant's arguments with respect to claims 57-67 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,272,150 to Hrastar et al.

U.S. Pat. No. 6,266,607 to Meis et al.

U.S. Pat. No. 6,151,631 to Ansell et al.

U.S. Pat. No. 6,285,748 to Lewis.

U.S. Pat. No. 6,347,078 to Narvaez-Guarnieri et al.

U.S. Pat. No. 5,774,668 to Choquier et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AVI GOLD whose telephone number is (571)272-4002. The examiner can normally be reached on M-F 8:00-5:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Avi Gold

Patent Examiner

Art Unit 2457

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Supervisory Patent Examiner, Art Unit 2457